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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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TITLE: CELL CULTURE PATTERNING SUBSTRATE

THE COMMISSIONER FOR PATENTS  
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**AMENDED CLAIMS**

1-6. (cancelled)

7. (new) A cell culture patterning substrate comprising:

a base material; and

a cell culture region which is formed on the base material, is a region for culturing a cell and contains a cell adhesive layer having adhesive properties to the cell,

wherein the cell culture region comprises:

a cell adhesion portion at which the cell adhesive layer is formed; and

a cell adhesion auxiliary portion, formed in a pattern, which inhibits adhesion to the cell, and

the cell adhesion auxiliary portion is formed such that, upon adhesion of the cell to the cell adhesion portion, the cells on two cell adhesion portions adjacent to the cell adhesion auxiliary portion can be bound to each other on the cell adhesion auxiliary portion.

8. (new) The cell culture patterning substrate according to claim 7, wherein the cell adhesion auxiliary portion is formed in a line form in the cell culture region.

9. (new) The cell culture patterning substrate according to claim 7, wherein a boundary between the cell adhesion auxiliary portion and the cell adhesion portion is formed in a pattern with concavoconvex.

10. (new) The cell culture patterning substrate according to claim 8, wherein a boundary between the cell adhesion auxiliary portion and the cell adhesion portion is formed in a pattern with concavoconvex.

11. (new) A cell culture patterning substrate comprising:

a base material; and

a cell culture region which is formed on the base material, is a region for culturing a cell and contains a cell adhesive layer having adhesive properties to the cell,

wherein an edge part of the cell adhesive layer is formed in a pattern with concavoconvex.

12. (new) The cell culture patterning substrate according to claim 11, wherein the distance between an edge part of the concave portion and an edge part of the convex portion of the concavoconvex, upon adhesion of the cell to the cell adhesive layer, is a size that the cells are aligned linearly.

13. (new) The cell culture patterning substrate according to claim 11, wherein the average distance, between the edge part of the concave portion and the edge part of the convex portion of the concavoconvex, is in the range of 0.5  $\mu\text{m}$  to 30  $\mu\text{m}$ .

14. (new) The cell culture patterning substrate according to claim 12, wherein the average distance, between the edge part of the concave portion and the edge part of the convex portion of the concavoconvex, is in the range of 0.5  $\mu\text{m}$  to 30  $\mu\text{m}$ .